

Seabrook Pet Waste Control Project

A Final Report to

The New Hampshire Department of Environmental Services

Submitted by

Seabrook Conservation Commission

Town of Seabrook

P. O. Box 456

Seabrook, NH 03874

June 26, 2009

Funding for this project was provided in part by a Watershed Assistance Grant from the NH Department of Environmental Services with Clean Water Act Section 319 funds from the U.S. Environmental Protection Agency.

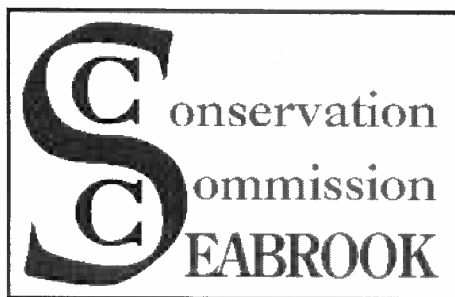
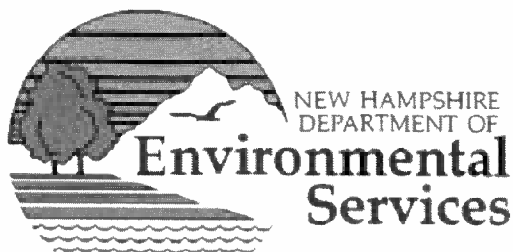


Table of Contents

Table of Contents	2
Executive Summary	3
Introduction.....	3
Cains Brook Watershed Map	5
Project Performance Targets and Milestones	6
Project Outcomes and Measurable Results.....	7
Conclusions and Recommendations	7
Appendices.....	8
Pet Waste Flier	9
Pet Waste Poster	11
Hampton Union Article.....	12

Executive Summary

The Seabrook Pet Waste Control Project's intent is to bring attention to pet waste control issues and the local benefits possible with water quality improvements (boating, fishing, swimming, shell fishing, beaches).

The Seabrook Conservation Commission created fliers and posters addressing the importance of properly disposing of pet waste. The Seabrook Department of Public Works installed the new catch basin markers at all catch basins in the Cains Brook Watershed.

The fliers were inserted to the dog license renewal notices sent out by the Town's Clerk office in March 2009. The posters were put up in all town buildings.

The project began December 6, 2007 and was completed on June 28, 2009. The grant award was for \$5,800.00 with a match of \$4,037.00 , which exceeded the required 40% match requirement.

Introduction

The Cains Brook/ Mill Creek watershed is an impaired freshwater stream system and series of ponds which flows into the tidal estuary including Mill Creek and Hampton/ Seabrook Harbor. NHDES has identified this watershed to be impaired by excessive E.coli bacteria and as a significant contributor of bacteria contamination to the shellfish harvesting and recreational areas of Hampton/Seabrook Harbor and the Cains Brook watershed.

The Seabrook Conservation Commission has recently completed a watershed management plan to restore this important watershed and reduction in bacteria loading is important to water quality improvements. A NH DES ribotyping study (*Tracking Bacterial Pollution Sources in the Cains Brook Watershed and Mill Creek Watersheds, NH DES, December, 2005*) did identify *Escherichia coli (E.coli)* from dog sources in this watershed (fresh and salt water).

The ***Cains Brook and Mill Creek Watershed Management Plan*** included the following goals and action items specifically related to this project:

Goal 1. Improve the water quality of Cains Brook/Mill Creek to meet New Hampshire water quality standards including shellfish standards for E.coli bacteria.

Objective 1: Ensure that Cains Brook meets Class B water quality standards for bacteria, turbidity, temperature, nutrients, pH and dissolved oxygen and its designated use by 2010.

Goal 2. Improve the management of stormwater runoff in an effort to protect storm water quality and reduce peak stormwater flows.

Objective 1: Identify watershed pollution sources and determine Best Management Practices for eliminating or minimizing the effects of these pollutants.

Goal 4. Build community support for the protection and enhancement of the land and water resources of the Cains Brook Watershed.

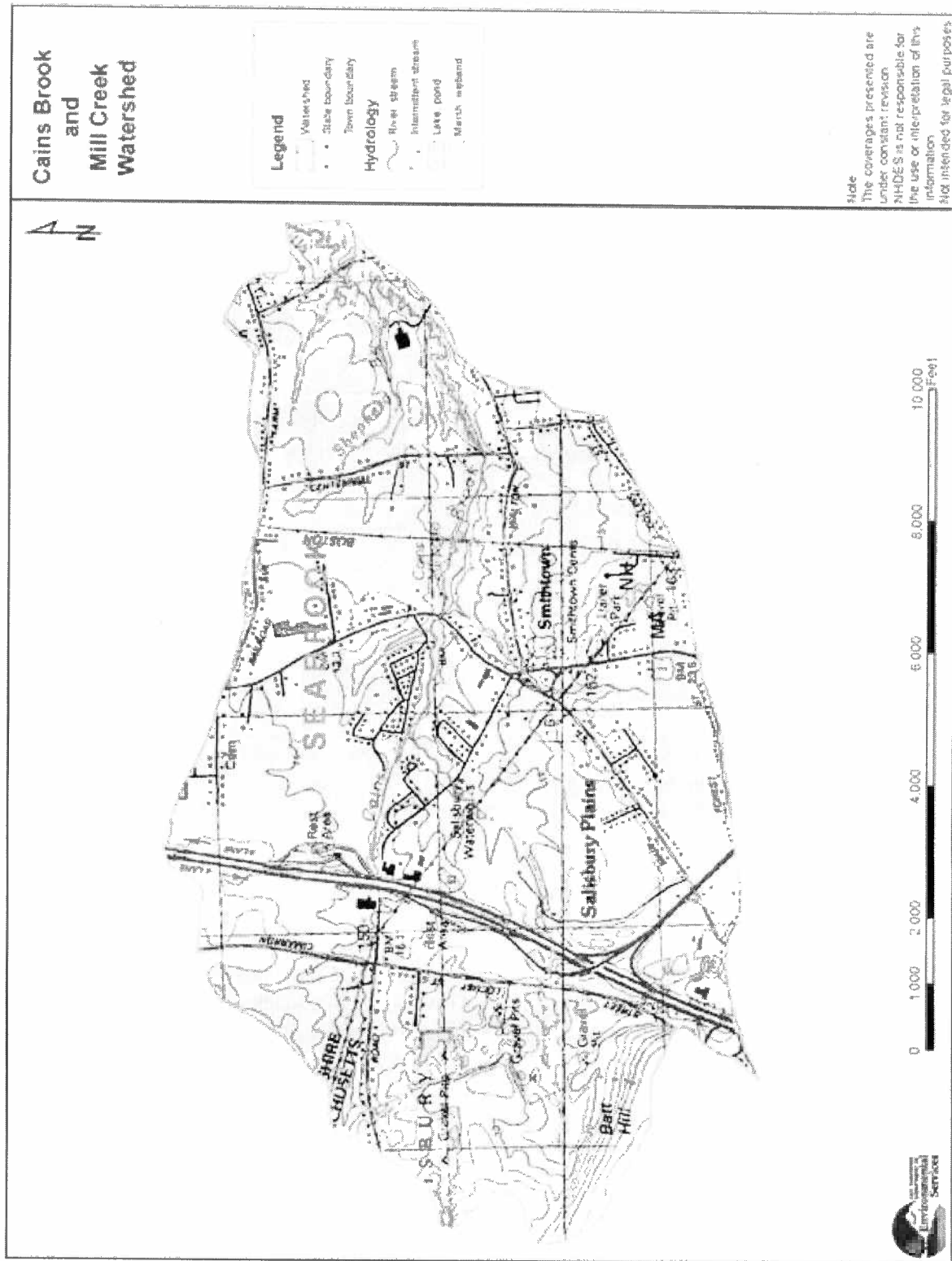
Objective 1: Prepare an outreach program to citizens and businesses to promote and implement the watershed plan.

Goal 6. Provide for long-term health and environmental quality of Cains Brook and Mill Creek by ensuring that the Watershed Plan's goals are continually met.

Objective 1: Monitor water quality at appropriate locations in Cains Brook and Mill Creek in cooperation with personnel from NHDES

The Seabrook Conservation Commission had received multiple complaints from concerned citizens about the lack of proper pet waste disposal. Additionally the Seabrook Department of Public Works had similar complaints and DPW workers noted an increase in pet waste on roadsides and plastic bags, with waste inside, tossed into the roadside woodland vicinity. The DPW posted signs in multiple locations which stated the need to dispose of pet waste properly and referenced the law and potential fine.

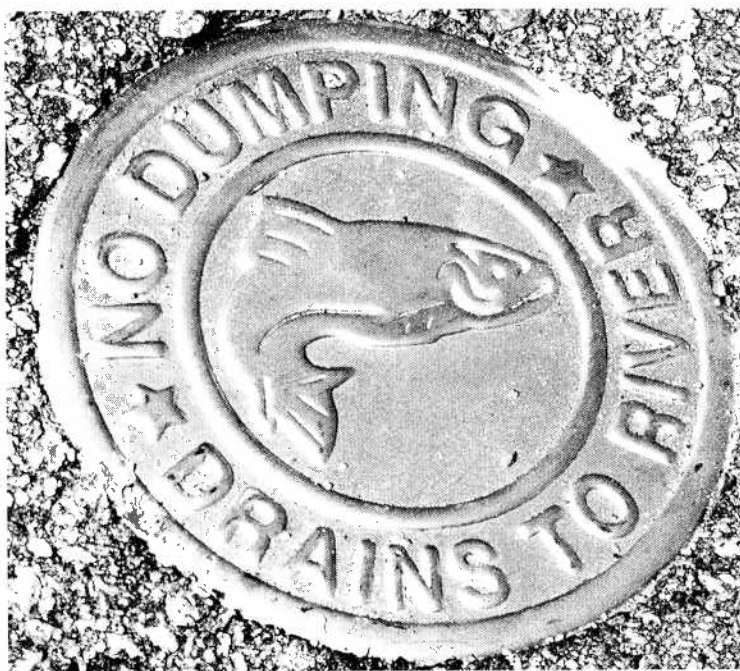
Cains Brook Watershed Map



Project Performance Targets and Milestones

The Seabrook Pet Waste Control Plan was supervised by the Seabrook Conservation Commission and was coordinated with the Seabrook Nonpoint Source Pollution Committee (EPA 319 Cains project). The actions completed under this grant are as follows:

1. Install catch basin markers in neighborhoods along Cains Brook, Mary's Brook, Cains Pond, Mary's Pond and Secord's Pond. Unlike stenciling which typically only lasts one year, the catch basin markers will be stainless steel discs, embossed with "NO DUMPING, DRAINS TO RIVER" and a fish image for increased emphasis.



2. Develop a web page on the Town web site to bring attention to the new catch basin markers, pet waste control issues and the local benefits possible with water quality improvements (boating, fishing, swimming, shell fishing, beaches).
3. Develop and distribute a similar color graphics brochure to be posted in Town buildings, the recreation center, library, etc. Also distribute a black and white version of the brochure with pet license renewals. (See appendix for brochure and poster.)

Partners:

- Seabrook Public Works Department
- Seabrook Animal Control Officer
- Town Clerk's Office
- NHDES for continuation of water quality monitoring efforts
- Consultants: *Waterfront Engineers*
- Nonpoint source pollution committee (EPA 319 Cains project)

Project Outcomes and Measurable Results

Desired Outcome:

Produce a reduction in water borne bacteria and an improvement in water quality and uses of the watershed resources. The water quality of the Cains Brook watershed will be monitored through other funded projects.

Unfortunately the Seabrook Town Budget was not approved by the voting public, thus the funds appropriated for a new town website were not available. The Seabrook Conservation Commission did post the flier on the current Town Web site, which is extremely limited in ability and function.

The Town Office and Seabrook Conservation Commission have had multiple citizens comment on the disks installed near the catch basins. Some individuals indicated that they had no idea where the catch basin emptied to, they were under the impression that it went to the municipal sewer.

Residents that live nearby the areas in which pet waste was tossed into the woodlands have mentioned that since the fliers were mailed out there seems to be less improper disposal activity.

The Hampton Union ran an article addressing pet waste and non-point pollution. (See appendix for copy of article.)

The Town Clerk's Office maintains a database for dog licenses. A review of the listings indicates that over 850 households have dogs. Each of these households received the flier on the importance of proper pet waste disposal.

Conclusions and Recommendations

It appears that overall the Pet Waste Project was successful in bringing attention to the non-point pollution aspects from not disposing of pet waste properly. The public comments to assorted town offices and officials were numerous and supportive.

The DPW found that the drill bit sold with the disks was not able to successfully drill into asphalt. They purchased a substantially stronger "Max-SDS" diamond and carbide bit that could cut into asphalt. They also had to rent a larger "Roto-Hammer" to successfully drill into the asphalt.

The posters did not get much time up on the walls due to being replaced with more timely information. The Seabrook Conservation Commission will print additional posters and seek opportunities for maximum viewing.

Appendices

WHY DO I NEED TO PICK UP AFTER MY DOG?

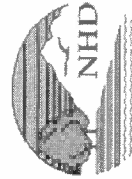
- Abandoned pet waste contains a host of diseases and/or parasites, which can infect other dogs or be transmitted to people who might step in it and track it home.
- Rain and garden runoff washes pet waste into the storm drain systems which flow into our brooks, streams, ponds and harbor creating public health issues.
- **It is the law!** Just like littering, it is unlawful NOT to pick up after your dog and is subject to a fine. The law requires that you must always pick up after your dog and carry "a suitable instrument" to do so whenever you walk your dog



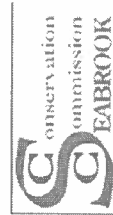
During the summer of 2008 your DPW crew installed over 900 of these disks near stormwater catch basins.

For more information:

http://des.nh.gov/organization/divisions/iwa/ter/wmb/coastal/scoop_the_poop.htm



Funding for this project was provided in part by a grant from the NH Department of Environmental Services with funding from the US EPA under Section 319 of the Clean Water Act.



P. O. Box 456, Seabrook, NH 03874

PLEASE PICK UP



AFTER YOUR PET

Everyone loves their dogs, but cleaning up after them is a different story!

Dog poop is toxic and contains germs and bacteria.

Children sometimes pick up things they shouldn't, and this may create health issues.

Dog poop pollutes the ground and the waters we play in and drink.

Pet Waste Flier

THE "DIRT" ON POOP

Studies show that about half of all dog owners walk their dogs in public areas. However, up to 40 percent do not clean up after their pets. Pet waste, whether left on paved surfaces or dumped outside, does not simply "disappear". This waste can be washed into storm drains, where it eventually enters our brooks, ponds, streams and harbor. Bacteria in pet waste can contaminate our water, making it dangerous for drinking and swimming. It can also contaminate shellfish beds, making it hazardous to harvest and eat the shellfish.

Cleaning up after pets and properly disposing of their waste products helps to protect Seabrook's waterways.

Cleaning up after pets protects people from exposure to waste-borne bacteria on land as well.

PET WASTE SHOULD ALWAYS BE PUT IN THE TRASH OR FLUSHED IN THE TOILET. NEVER WASH IT INTO THE GUTTER OR STORM DRAIN.

ARE YOU RISKING YOUR HEALTH?

When pet waste is disposed of improperly, not only water quality suffers – your health may be at risk, too. Pets, children who play outside, and adults who garden are most at risk for infection from some of the bacteria and parasites found in pet waste. Flies may also spread diseases from animal waste. Diseases or parasites that can be transmitted from pet waste to humans include:

Campylobacteriosis – A bacterial infection carried by dogs and cats that frequently causes diarrhea in humans.

Cryptosporidium – A protozoan parasite carried by dogs, cats, mice, and many other mammals. Common symptoms include diarrhea, stomach cramps, nausea and dehydration. May be fatal to people with depressed immune systems.

Toxocariasis – Roundworms usually transmitted from dogs to humans, often without noticeable symptoms, but may cause vision loss, a rash, fever, or cough.

Toxoplasmosis – A protozoan parasite carried by cats that can cause birth defects such as mental retardation and blindness if a woman becomes infected during pregnancy; also a problem for people with depressed immune systems. Symptoms include headache, muscle aches, lymph node enlargement.

HOW YOU CAN HELP

There is a simple step pet owners can take to be good environmental stewards. Simply, carry a plastic bag when you walk your dog and use it to pick up the poop. **Once you have got it bagged, be sure to dispose of it properly.**

Research suggests that dog walkers take the time to pick up after their dogs, but then sometimes toss it down the nearest storm drain or into the woods. Both of these methods still pollute our water. The safest way to get rid of pet waste is to throw it in a trash can or flush it down the toilet (not in the plastic bag).

Encourage good pet waste management in your neighborhood. The next time you see somebody walking down the street with a bag, smile and say "thanks!"



Your actions set an example for others. When you pick up after your dog, you are helping the environment. Thank you for doing your part and disposing of pet waste properly!

Pet Waste Poster



**Everyone loves their dogs,
but cleaning up after them is a different story!**

Dog poop is toxic and contains germs and bacteria.

**Children sometimes pick up things they shouldn't, and this
may create health issues.**

Dog Poop pollutes the ground and waters we play in and drink.



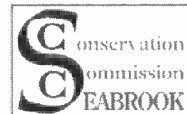
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**Thank you for doing your part and
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Note: Poster reduce in size for this report, originally printed as 11" X 17" format

Hampton Union Article

Seabrook dealing with pet waste

Conservation Commission spurs efforts

By **Megan Specia**

hamptonunion@seacoastonline.com

January 30, 2009 6:00 AM

SEABROOK — The town of Seabrook will soon be on its way to completing an awareness campaign dealing with the proper disposal of pet waste. The program is focusing on the adverse affects that this material can have on the environment when it is not disposed of properly.

By encouraging the responsible removal of pet waste by owners, the town hopes to eliminate one of the contributors to non-point source pollution. Non-point source pollution occurs when the waste is picked up by runoff water and eventually makes its way into rivers, lakes, and coastal waters, carrying the pollutants with it.

"It's actually a big problem everywhere," said Susan Foote, the Conservation Commission chairman. "Dog waste is considered a non-point pollution contributor.

"Non-point pollution is non-specific, like if someone were to tip over barrel of oil you would know where it's coming from. But dog waste, because it can come from anywhere is considered non-point pollution," Foote said.

Especially during the summer months, the bacteria found in pet waste can multiply and end up in areas that people use for recreation and other purposes, putting them at risk.

"Dog waste is a huge contributor to E. coli," said Foote. "Generally people walk their dogs on the side of the road and the waste that is there washes down to a catch basin, and that basically becomes an incubator in the summer because of the heat making a bloom of bacteria that can end up in wetlands and the ocean."

In an attempt to get the message out, the town's Conservation Commission will distribute informational brochures to pet owners and also create other methods to address the issue. In addition, storm drains that lead directly to surface waters will be labeled with steel disks discouraging the dumping of waste.

The town has been approved for an extension of the original deadline to create the program. The town received a federal grant to fund the informative campaign and was given \$7,000 towards its creation. However, it was not completed in the time allotted. The town was recently given six additional months to finish the program.

According to a statement written by Thomas Burack, Commissioner of the Department of Environmental Services, "The purpose of the approved project is to reduce sources of bacteria in waterways through outreach to pet owners."

The current grant agreement was due to expire on Dec. 31, 2008, however, as a result of actions taken by Gov. John Lynch and the Executive Council in December, the completion date has been extended to June 30. This will allow the town more time to create an effective program to deal with the disposal of pet waste in the town.

According to Foote, the program is already in fully swing and is expected to be fully completed well before the deadline.

"We've accomplished a majority of it," she said. "The DPW (town Department of Public Works) has already installed steel labels on catch basin grids that drain into the Cains Brook Watershed area."

A fact sheet will also be distributed in town once it is approved by the DES. It contains information on the dangers of pet waste contaminating water.

The Conservation Commission plans to implement the final part of its program in mid-March. At that time, the town of Seabrook sends out flyers reminding residents to renew their dog licenses.

"With the license renewal reminders, we are going to stuff in a flyer, which talks about the effects of animal waste and how to dispose of it," said Foote.

Through all of these methods, the Conservation Commission is hoping to get the message out to residents of Seabrook that pet waste can be incredibly harmful.

Similar information programs have successfully been implemented in nearby communities such as Greenland and Dover.

Details

According to the DES web site, pet owners can take a few easy steps to prevent pet waste contamination:

1. Carry a plastic bag with you when you walk your dog. Re-using an old newspaper delivery bag or plastic grocery bag works well.
2. Using the bag like a glove, you can then pick up the pet waste, turn the bag inside out around the waste, seal the bag, and dispose of it in a trash can. You can also flush un-bagged pet waste down the toilet.
3. Don't place the bagged or un-bagged pet waste in a storm drain or hose the pet waste towards storm drains as they drain directly to a stream, river, lake or other water body.
4. If you have a large yard, you may bury un-bagged pet waste in the yard at least five inches in the ground and away from vegetable gardens and waterways.